

IN THE CLAIMS

Please amend the claims as follows:

5           1.   (Currently Amended) Colloidal system of ceramic nanoparticles in a dispersion medium, comprising nanoparticles of zirconium dioxide, aluminum oxide, iron oxide or barium titanate which are enriched in volume percentages of 1% to 60% in the dispersion medium, wherein the nanoparticles are  
10 dispersed in the dispersion medium in a particle size range of 1nm to 100nm, ~~characterized in that~~ and the nanoparticles are dispersed substantially to primary particle size in the dispersion medium, 90% or more than 90% of the nanoparticles distributed in the dispersion medium have a coinciding  
15 particle size, wherein the particle size variation decreases from 50%, related to nanoparticles of 1nm, to 10% for nanoparticles of 100nm, and the atoms and/or ions located in the surface of the nanoparticles are saturated in terms of valence in dependence on the concentration of the  
20 nanoparticles in the dispersion medium using a surface modifier such that an energetic balance of the nanoparticles in the dispersion medium is obtained.

25           2.   (Currently Amended) Colloidal system according to claim 1, ~~characterized in that~~ wherein an inorganic acid, such as HCl and/or a betadiketone and/or isocyanate, and/or an organic acid such as  $C_2H_4O_2$  and/or acid chlorides and/or acid ester and/or silanes and/or a polyoxycarboxylic acid are added to the dispersion medium as surface modifier.

3. (Currently Amended) Colloidal system according to claim 1, ~~characterized in that~~wherein the dispersion medium is H<sub>2</sub>O, alcohol, tetrahydrofuran and/or a halogenated hydrocarbon  
5 and/or a diluted acid and/or a diluted lye and/or a hydrocarbon and/or an aromatic hydrocarbon.

4. (Currently Amended) Use of the colloidal system according to claim 1 as an improving component for ceramic  
10 components, plastic materials etc, and as a filler for thermal insulation or sound insulation etc.

5. (Currently Amended) Use of the colloidal system according to claim 1 as a gas sensor or as a component of a  
15 gas sensor.

6. (Currently Amended) Use of the colloidal system according to claim 1 as a ceramic hollow fiber or as a component of a ceramic hollow fiber.  
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7. (Currently Amended) Use of the colloidal system according to claim 1 as a nano-filtration diaphragm or as a component of a nano-filtration diaphragm.